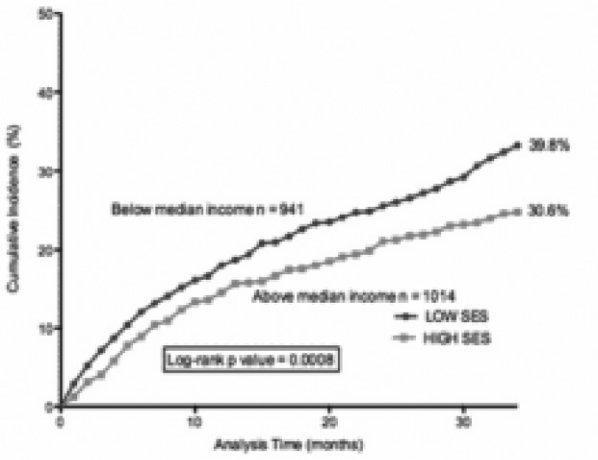
Figure 1. Cumulative incidence of MACE by income status



Low Socioeconomic Status	6 months	12 months	24 months	36 months
No. at risk	706	608	460	324
Cumulative no. of events	132	177	228	314
Cumulative Incidence (%)	10.4%	16.6%	24.9%	39.8%

High Socioeconomic Status	6 months	12 months	24 months	36 months
No. at risk	756	657	484	345
Cumulative no. of events	110	154	197	250
Cumulative Incidence (%)	7.8%	13.6%	19.9%	30.6%

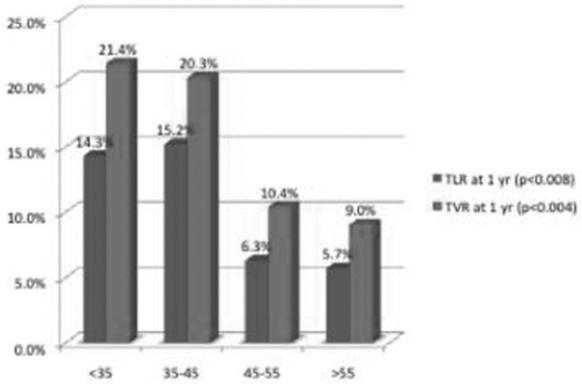


Fig.1: Percentage of TLR and TVR at 1 year in women post PCI grouped by age.

TCT-369

Comparison of Target Lesion and Vessel Revascularization in Women of Different Age Groups after Percutaneous Coronary Intervention for Acute Coronary Syndrome

Soha Ahmad[1], Omid Fatemi[1], Rebecca Torguson[2], Joseph Lindsay[3], Ron Waksman[4]
[1]Washington Hospital Center/Georgetown University Hospital, Washington, DC, [2]Washington Hospital Center, washington, DC, [3]Washington Hospital Center, Washington, DC, [4]Georgetown University, Washington, DC

Background: Women have a lower risk for coronary artery disease (CAD) and present at an older age with multiple comorbidities. Young women who present with CAD, albeit uncommon, likely reflect accelerated progression of atherosclerosis. It is unclear whether presentation of CAD in women younger than 55 translates into higher rates of target lesion revascularization (TLR) and target vessel revascularization (TVR) post percutaneous coronary intervention (PCI). We compared rates of TLR and TVR at 1 year post PCI in women younger and older than 55.
Methods: 2219 women who underwent PCI at Washington Hospital center for an acute coronary syndrome were divided by age into four groups (less than 35: 14 patients, 35-45: 83 patients, 45-55: 295 patients, and older than 55: 1827 patients). TLR and TVR were recorded at 1 year (2030 and 2044 patients respectively).
Results: There were no significant difference in the use of stents, use of drug eluting stents (DES), stent number, length or diameter in the different age groups. There were no differences in post PCI care with anti-platelet and statin therapy. Rates of TLR and TVR were significantly different among the various age groups with higher rates in younger groups:
Conclusions: Despite comparable rates of stent use, including DES, and comparable post PCI medical management, women in the younger age groups had higher rates of TLR and TVR at 1 year post PCI. Coronary artery disease in younger women likely reflects a more accelerated progression of the disease warranting close follow up.

TCT-370

Outcomes According to Sex Following Unprotected Left Main Stenting With Drug-Eluting Stents: The Milan Experience

Gill Buchanan[1], Alaide Chieffo[1], Chiara Bernelli[1], Alfonso Ielasi[1], Matteo Montorfano[1], Azeem Latib[1], Mauro Carlino[1], Filippo Figini[1], Irene Franzoni[1], Francesco Giannini[1], Alessandro Durante[1], Santo Ferrarello[1], Alfredo Castelli[1], Antonio Colombo[1]
[1]San Raffaele Scientific Institute, Milan, Italy

Background: Drug-eluting stents (DES) for the treatment of unprotected left main coronary artery (ULMCA) disease have been shown to be safe and effective. The aim was to assess clinical outcomes according to sex in this subset of patients.
Methods: All consecutive patients from our single-center prospective registry treated for ULMCA stenosis with both first- and new-generation DES from January 2005-June 2010 were analyzed. The study objectives were all-cause mortality, major adverse cardiac events (MACE), target vessel revascularization (TVR) and target lesion revascularization (TLR) at 2-years clinical follow-up.
Results: A total of 173 patients were included in the analysis. Notably, only 17.9% were females. No differences were observed between genders in baseline clinical characteristics. Regarding lesion characteristics, males were more likely to have distal ULMCA lesions affecting the bifurcation (83.8% vs. 61.3%; p=0.005) and undergo a 2-stent strategy (50.4% vs. 25.8%; p=0.013). In addition, males were significantly more likely to undergo paclitaxel-eluting stent implantation (34.5% vs. 9.7%; p=0.006). At 2-years clinical follow-up, there was a trend for increased all-cause mortality in females (12.9% vs. 4.2% vs. p=0.061). Conversely, there were no significant differences in TLR between females and males respectively (6.5% vs. 6.3%; p=0.981), TVR (22.6% vs. 14.1%; p=0.238), MI (3.2% vs. 1.4%; 0.483), MACE (29.0% vs. 16.9%; p=0.119). Moreover, there were 4 definite/probable stent thrombosis, all in first-generation DES, however this was not affected by the sex of the patient (3.2% vs. 2.1%; p=0.709).
Conclusions: Treatment with DES for ULMCA appears safe and effective regardless of sex. Despite more distal bifurcation lesions amongst males, there was a trend for a higher all-cause mortality amongst females which clearly needs to be assessed with larger patient numbers.

Heart Failure, LV Dysfunction, and Shock

Hall D

Tuesday, October 23, 2012, 8:00 AM–10:00 AM

Abstract nos: 371-391

TCT-371

First Clinical Evaluation of a Novel Percutaneous Right Ventricular Assist Device: The Impella RP

Anson Cheung[1], Darren Freed[2], Patrick Hunziker[3], Pascal Leprince[4]
[1]St Pauls Hospital, Vancouver, British Columbia, [2]University of Manitoba, Winnipeg, Manitoba, [3]University Hospital, Basel, Switzerland, [4]CHU La Pitié, Paris, France

Background: Right Ventricular Failure (RVF) is a clinical problem associated with a high mortality that occurs in a variety of settings including post-cardiotomy cardiogenic shock, cardiac transplant, right ventricular infarction, pulmonary embolism and after left ventricular assist device (LVAD) implantation. Temporary mechanical right ventricular support could be a reasonable alternative treatment option in these patients. We report here the initial first clinical evaluation of a novel minimally invasive percutaneous right ventricular assist device.
Methods: Impella RP is a new, minimally invasive, 3D catheter-based percutaneous microaxial pump that is designed for short-term right ventricular support. The device requires single vascular access through a sheath in the femoral vein. The device (22 Fr pump mounted on an 11 Fr catheter) is positioned under fluoroscopic guidance using a 0.025″ wire. It aspirates blood from the inferior vena cava and expels it into the pulmonary artery at the maximum rate of up to 4.4 liters per minute. The device requires low anticoagulation regimen.
Results: A First in Man pre-market clinical feasibility evaluation has been initiated at several sites in Canada and Europe in patients experiencing right ventricular failure in different clinical settings.Indications for use at the time of this submission included RVF post heart transplant